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| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
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EXAMINER

BUTLER, D

ART UNIT

PAPER NUMBER

2182

6

DATE MAILED:

10/16/00

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☒ Responsive to communication(s) filed on 11-16-98
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-34 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 1-10 is/are allowed.
- ☒ Claim(s) 11-13, 17-18, 21, 27-28 and 31-34 is/are rejected.
- ☒ Claim(s) 14-16, 19-20, 22-26 and 29-30 is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

1. This action is in response to the application filed on November 16, 1998. Claims 1-34 are pending.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title is imprecise. The title would be improved if it included that the frequency jittering control is for varying the switching frequency of a power supply.
3. Claims 27-28 and 32-34 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 27-28, the phrase "the primary current source" lacks proper antecedent basis. The phrase "the current sources" lacks proper antecedent basis and is unclear because it is unclear whether it refers to all the current sources including the primary current source or just the one or more current sources coupled to the control input.

Regarding claim 32, the phrase "the means for ... the capacitor" lacks proper antecedent basis and is unclear as to its relationship to the current source adapted to charge and discharge the capacitor.

Regarding claim 33, the phrase "the analog to digital converter" lacks proper antecedent basis. The phrase "the current sources" lacks proper antecedent basis and is unclear because it is unclear whether it refers to all the current sources including the primary current source or just the one or more current

sources coupled to the control input.

Regarding claim 34, the phrase "comparators coupled to the capacitor to the current source" is unclear as to the coupling of the comparators.

4. The following is a quotation of the appropriate paragraphs of 35 USC § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. This application currently names joint inventors. In considering patentability of the claims under 35 USC 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 USC 102(f) or (g) prior art under 35 USC 103.

6. The following is a quotation of 35 USC 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

7. Claims 11, 13, 17, 21 and 31-32 rejected under 35 USC 102(b)

as being anticipated by Albach, U.S. Patent 4,712,169.

Per claims 11, 13 and 17:

A) Albach teaches the following claimed items:

1. generating a primary current/voltage with Uref of figure 1, at column 4, lines 13-15 and at column 5, lines 38-47;
2. cycling one or more secondary current/voltage sources to generate a secondary current/voltage which varies over time with U1 of figures 1 and 2, at column 4, lines 10-15 and at column 4, line 57 - column 5, line 8;
3. supplying the primary and secondary currents/voltages to a control input of an oscillator (VCO 34) for generating a switching frequency which varies over time with U2 of figures 1 and 2, at column 4, lines 15-26 and at column 5, lines 9-66.

Per claims 21 and 31-32:

A) Albach teaches the following claimed items:

1. an oscillator with VCO 34 of figure 1, at column 4, lines 15-26 and 41-61;
2. means for varying the switching frequency including a capacitor, a current source and a comparator with comparator circuit 31, monostable trigger 32 and integrator 33 of figure 1, at column 4, lines 7-26.

8. Claims 12 and 18 rejected under 35 USC 103 as being unpatentable over Albach, U.S. Patent 4,712,169.

The claims seem to differ from Albach in that Albach fails to explicitly teach clocking a counter with the output of the oscillator as claimed. However, Albach describes

clocking SR Latch 26 of figure 1 and at column 4, lines 20-26 in order to condition the output of the oscillator for the switching transistor. Albach does not explicitly describe using a counter to condition the oscillator output signal. However, counters are routinely used as frequency dividers in order to generate the desired frequency for the receiving device. It would have been obvious to one having ordinary skill in the data processing art at the time the invention was made to replace the SR latch with a counter in order to increase the flexibility of the pulse generating circuit by allowing the oscillator frequency to be divided down to a lower frequency and properly condition the oscillator output to the proper switching frequency.

9. Claims 1-10 are allowable over the art of record.
10. Claims 14-16, 19-20, 22-26 and 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is (703) 305-9663. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Dennis M. Butler
October 10, 2000

Dennis M. Butler
Dennis M. Butler
Primary Examiner
Group 2180